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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/527,453

03/15/2006

Hartmut M. Hanauske-Abel

601-1-135PCT

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EXAMINER

YU, MISOOK

ART UNIT

PAPER NUMBER

1642

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/527,453	<b>Applicant(s)</b> HANAUKE-ABEL ET AL.	
	<b>Examiner</b> MISOOK YU	<b>Art Unit</b> 1642	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) 4-43 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election with traverse of group I, claims 1-3 in the reply filed on 10/29/2009 is acknowledged. The traversal is on the ground(s) that the groups designated by the examiner fail to define methods and compositions with properties so distinct as to warrant separate examination and search. This is not found persuasive because the instant application is a 371 whose restriction requirement is governed by PCT Rule 13.2. Since the first claimed invention does not contribute over the art (note the art rejection below and the Office action mailed on 09/03/2009), the invention groups drawn to method of using the elected product lack the same or corresponding technical features. Thus, searching the invention groups II-XI requires undue search burden to the examiner.

The requirement is still deemed proper and is therefore made FINAL.

Claims 4-43 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Claims 1-43 are pending. Claims 1-3 are examined on merits.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 1642

Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Bergeron et al., J. Med. Chem., 1998, 41 (20), pp 3888–3900.

Claims 1-3 are drawn to a ligand (an antibody as the ligand in claims 2 and 3) binding to the hypusine residue of eIF-5A.

Bergeron et al., teaches monoclonal antibodies are generated the hypusine-containing hexapeptide (Cys-Thr-Gly-Hpu-His-Gly). Thr-Gly-Hpu-His-Gly is same as amino acid residues 48-52 of the instant SEQ ID NO: 1 and 2 (known as eIF-5A in the art). “Hpu” is the modified Lys-50 of the instant SEQ ID NO: 1 and 2. Note Table 1 for the characteristics of the hypusine binding monoclonal antibodies.

Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Ruhl et al., The Journal of Cell Biology, (1993) Vol. 123, pages 1312-1320.

Ruhl et al., teaches antibody binding to eIF-5A (note Fig. 4 on page 1313), which is same as the instant SEQ ID NO: 2 and teaches eIF-5A has hypusine at Lys-50 (note page 1317).

Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Beninati et al., FEBS Letters, vol. 437, pages 34-38.

Beninati et al., teaches an antibody binding to hypusine containing eIF-5A.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Xu et al., January 26, 2001 The Journal of Biological Chemistry, 276, 2555-2561.

Xu et al., teaches a ligand binding to hypusine containing eIF-5A.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MISOOK YU whose telephone number is 571-272-0839. The examiner can normally be reached on 8 A.M. to 5:30 P.M., every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Larry Helms can be reached on 571-272-0832. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MISOOK YU  
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Art Unit 1642

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